Byung Hee Hong

List of Publications by Year in descending order

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220 papers

42,560 citations

7069 78 h-index 204 g-index

226 all docs

226 docs citations

times ranked

226

45025 citing authors

#	Article	IF	Citations
1	Large-scale pattern growth of graphene films for stretchable transparent electrodes. Nature, 2009, 457, 706-710.	13.7	9,624
2	Roll-to-roll production of 30-inch graphene films for transparent electrodes. Nature Nanotechnology, 2010, 5, 574-578.	15.6	7,294
3	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. Nanoscale, 2015, 7, 4598-4810.	2.8	2,452
4	Biomedical Applications of Graphene and Graphene Oxide. Accounts of Chemical Research, 2013, 46, 2211-2224.	7.6	1,420
5	Extremely efficient flexible organic light-emitting diodes with modified graphene anode. Nature Photonics, 2012, 6, 105-110.	15.6	1,272
6	Wafer-Scale Synthesis and Transfer of Graphene Films. Nano Letters, 2010, 10, 490-493.	4.5	1,062
7	Graphene for Controlled and Accelerated Osteogenic Differentiation of Human Mesenchymal Stem Cells. ACS Nano, 2011, 5, 4670-4678.	7.3	819
8	Length-dependent thermal conductivity in suspended single-layer graphene. Nature Communications, 2014, 5, 3689.	5.8	735
9	Ultrathin Single-Crystalline Silver Nanowire Arrays Formed in an Ambient Solution Phase. Science, 2001, 294, 348-351.	6.0	644
10	Enhanced Differentiation of Human Neural Stem Cells into Neurons on Graphene. Advanced Materials, 2011, 23, H263-7.	11.1	626
11	Prospects and Challenges of Graphene in Biomedical Applications. Advanced Materials, 2013, 25, 2258-2268.	11.1	573
12	Anomalous Behaviors of Visible Luminescence from Graphene Quantum Dots: Interplay between Size and Shape. ACS Nano, 2012, 6, 8203-8208.	7.3	563
13	High-Performance Graphene-Based Transparent Flexible Heaters. Nano Letters, 2011, 11, 5154-5158.	4.5	457
14	Covalently Bridging Gaps in Single-Walled Carbon Nanotubes with Conducting Molecules. Science, 2006, 311, 356-359.	6.0	438
15	Graphene transfer: key for applications. Nanoscale, 2012, 4, 5527.	2.8	405
16	High-Performance Flexible Graphene Field Effect Transistors with Ion Gel Gate Dielectrics. Nano Letters, 2010, 10, 3464-3466.	4.5	390
17	Stretchable Graphene Transistors with Printed Dielectrics and Gate Electrodes. Nano Letters, 2011, 11, 4642-4646.	4.5	351
18	UV/Ozone-Oxidized Large-Scale Graphene Platform with Large Chemical Enhancement in Surface-Enhanced Raman Scattering. ACS Nano, 2011, 5, 9799-9806.	7.3	350

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19	Materials for Flexible, Stretchable Electronics: Graphene and 2D Materials. Annual Review of Materials Research, 2015, 45, 63-84.	4.3	341
20	Graphene quantum dots prevent α-synucleinopathy in Parkinson's disease. Nature Nanotechnology, 2018, 13, 812-818.	15.6	339
21	Near-field focusing and magnification through self-assembled nanoscale spherical lenses. Nature, 2009, 460, 498-501.	13.7	338
22	Surface-Directed Molecular Assembly of Pentacene on Monolayer Graphene for High-Performance Organic Transistors. Journal of the American Chemical Society, 2011, 133, 4447-4454.	6.6	309
23	Scaling of Resistance and Electron Mean Free Path of Single-Walled Carbon Nanotubes. Physical Review Letters, 2007, 98, 186808.	2.9	285
24	Self-Activated Transparent All-Graphene Gas Sensor with Endurance to Humidity and Mechanical Bending. ACS Nano, 2015, 9, 10453-10460.	7.3	277
25	Large-scale patterned multi-layer graphene films as transparent conducting electrodes for GaN light-emitting diodes. Nanotechnology, 2010, 21, 175201.	1.3	259
26	Self-Assembled Arrays of Organic Nanotubes with Infinitely Long One-Dimensional H-Bond Chains. Journal of the American Chemical Society, 2001, 123, 10748-10749.	6.6	248
27	Chemical vapour deposition. Nature Reviews Methods Primers, 2021, 1, .	11.8	244
28	Work-Function Engineering of Graphene Electrodes by Self-Assembled Monolayers for High-Performance Organic Field-Effect Transistors. Journal of Physical Chemistry Letters, 2011, 2, 841-845.	2.1	237
29	Singleâ€Gate Bandgap Opening of Bilayer Graphene by Dual Molecular Doping. Advanced Materials, 2012, 24, 407-411.	11.1	228
30	All Graphene-Based Thin Film Transistors on Flexible Plastic Substrates. Nano Letters, 2012, 12, 3472-3476.	4.5	225
31	Exfoliation and Raman Spectroscopic Fingerprint of Few-Layer NiPS3 Van der Waals Crystals. Scientific Reports, 2016, 6, 20904.	1.6	222
32	Toward Wafer Scale Fabrication of Graphene Based Spin Valve Devices. Nano Letters, 2011, 11, 2363-2368.	4.5	214
33	Flexible Inorganic Nanostructure Lightâ€Emitting Diodes Fabricated on Graphene Films. Advanced Materials, 2011, 23, 4614-4619.	11.1	210
34	Graphene Oxide Flakes as a Cellular Adhesive: Prevention of Reactive Oxygen Species Mediated Death of Implanted Cells for Cardiac Repair. ACS Nano, 2015, 9, 4987-4999.	7.3	203
35	Smart Contact Lenses with Graphene Coating for Electromagnetic Interference Shielding and Dehydration Protection. ACS Nano, 2017, 11, 5318-5324.	7.3	202
36	Fast Synthesis of High-Performance Graphene Films by Hydrogen-Free Rapid Thermal Chemical Vapor Deposition. ACS Nano, 2014, 8, 950-956.	7.3	195

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37	Substituent Effects on the Edge-to-Face Aromatic Interactions. Journal of the American Chemical Society, 2005, 127, 4530-4537.	6.6	190
38	Transparent Flexible Organic Transistors Based on Monolayer Graphene Electrodes on Plastic. Advanced Materials, 2011, 23, 1752-1756.	11.1	189
39	Graphene-based nanomaterials for versatile imaging studies. Chemical Society Reviews, 2015, 44, 4835-4852.	18.7	176
40	Efficient Transfer of Large-Area Graphene Films onto Rigid Substrates by Hot Pressing. ACS Nano, 2012, 6, 5360-5365.	7.3	172
41	Balancing Light Absorptivity and Carrier Conductivity of Graphene Quantum Dots for High-Efficiency Bulk Heterojunction Solar Cells. ACS Nano, 2013, 7, 7207-7212.	7.3	171
42	Graphene–Ferroelectric Hybrid Structure for Flexible Transparent Electrodes. ACS Nano, 2012, 6, 3935-3942.	7.3	167
43	Graphene-Based Bimorph Microactuators. Nano Letters, 2011, 11, 977-981.	4.5	159
44	Active control of all-fibre graphene devices with electrical gating. Nature Communications, 2015, 6, 6851.	5.8	159
45	Graphene for displays that bend. Nature Nanotechnology, 2014, 9, 737-738.	15.6	150
46	Graphene-incorporated chitosan substrata for adhesion and differentiation of human mesenchymal stem cells. Journal of Materials Chemistry B, 2013, 1, 933.	2.9	144
47	Efficient Mode-Locking of Sub-70-fs Ti:Sapphire Laser by Graphene Saturable Absorber. Applied Physics Express, 2012, 5, 032701.	1.1	140
48	Control of Graphene Fieldâ€Effect Transistors by Interfacial Hydrophobic Selfâ€Assembled Monolayers. Advanced Materials, 2011, 23, 3460-3464.	11.1	138
49	Electrochemical Synthesis of CdSe Quantumâ€Dot Arrays on a Graphene Basal Plane Using Mesoporous Silica Thinâ€Film Templates. Advanced Materials, 2010, 22, 515-518.	11.1	137
50	Growth dynamics and gas transport mechanism of nanobubbles in graphene liquid cells. Nature Communications, 2015, 6, 6068.	5.8	136
51	N-doped graphene quantum sheets on silicon nanowire photocathodes for hydrogen production. Energy and Environmental Science, 2015, 8, 1329-1338.	15.6	136
52	Hydrogenated monolayer graphene with reversible and tunable wide band gap and its field-effect transistor. Nature Communications, 2016, 7, 13261.	5.8	136
53	N-doped monolayer graphene catalyst on silicon photocathode for hydrogen production. Energy and Environmental Science, 2013, 6, 3658.	15.6	134
54	Grapheneâ€'Regulated Cardiomyogenic Differentiation Process of Mesenchymal Stem Cells by Enhancing the Expression of Extracellular Matrix Proteins and Cell Signaling Molecules. Advanced Healthcare Materials, 2014, 3, 176-181.	3.9	133

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55	Quasi-Continuous Growth of Ultralong Carbon Nanotube Arrays. Journal of the American Chemical Society, 2005, 127, 15336-15337.	6.6	131
56	Towards industrial applications of graphene electrodes. Physica Scripta, 2012, T146, 014024.	1.2	131
57	An Ag-grid/graphene hybrid structure for large-scale, transparent, flexible heaters. Nanoscale, 2015, 7, 6567-6573.	2.8	130
58	Quasi-Periodic Nanoripples in Graphene Grown by Chemical Vapor Deposition and Its Impact on Charge Transport. ACS Nano, 2012, 6, 1158-1164.	7.3	129
59	High-quality, large-area monolayer graphene for efficient bulk laser mode-locking near 125 Î⅓m. Optics Letters, 2011, 36, 4089.	1.7	128
60	Plasmon-Enhanced Ultraviolet Photoluminescence from Hybrid Structures of Graphene/ZnO Films. Physical Review Letters, 2010, 105, 127403.	2.9	127
61	Size Control of Semimetal Bismuth Nanoparticles and the UVâ^'Visible and IR Absorption Spectra. Journal of Physical Chemistry B, 2005, 109, 7067-7072.	1.2	117
62	Graphene Potentiates the Myocardial Repair Efficacy of Mesenchymal Stem Cells by Stimulating the Expression of Angiogenic Growth Factors and Gap Junction Protein. Advanced Functional Materials, 2015, 25, 2590-2600.	7.8	114
63	Transferable Graphene Oxide by Stamping Nanotechnology: Electronâ€Transport Layer for Efficient Bulkâ€Heterojunction Solar Cells. Angewandte Chemie - International Edition, 2013, 52, 2874-2880.	7.2	112
64	Covalent conjugation of mechanically stiff graphene oxide flakes to three-dimensional collagen scaffolds for osteogenic differentiation of human mesenchymal stem cells. Carbon, 2015, 83, 162-172.	5.4	110
65	Oneâ€Step Synthesis of Nâ€doped Graphene Quantum Sheets from Monolayer Graphene by Nitrogen Plasma. Advanced Materials, 2014, 26, 3501-3505.	11.1	109
66	Assembling Phenomena of Calix[4]hydroquinone Nanotube Bundles by One-Dimensional Short Hydrogen Bonding and Displaced Ï€â^Ï€ Stacking. Journal of the American Chemical Society, 2002, 124, 14268-14279.	6.6	106
67	Graphene quantum dots: structural integrity and oxygen functional groups for high sulfur/sulfide utilization in lithium sulfur batteries. NPG Asia Materials, 2016, 8, e272-e272.	3.8	105
68	Ultraclean Patterned Transfer of Single-Layer Graphene by Recyclable Pressure Sensitive Adhesive Films. Nano Letters, 2015, 15, 3236-3240.	4.5	101
69	Graphene enhances the cardiomyogenic differentiation of human embryonic stem cells. Biochemical and Biophysical Research Communications, 2014, 452, 174-180.	1.0	97
70	Extremely stable graphene electrodes doped with macromolecular acid. Nature Communications, 2018, 9, 2037.	5.8	96
71	Reduced Water Vapor Transmission Rate of Graphene Gas Barrier Films for Flexible Organic Field-Effect Transistors. ACS Nano, 2015, 9, 5818-5824.	7.3	93
72	Graphene quantum dots as anti-inflammatory therapy for colitis. Science Advances, 2020, 6, eaaz2630.	4.7	88

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73	Optical response of large scale single layer graphene. Applied Physics Letters, 2011, 98, .	1.5	87
74	Vapor-Phase Molecular Doping of Graphene for High-Performance Transparent Electrodes. ACS Nano, 2014, 8, 868-874.	7.3	86
75	Selective n-Type Doping of Graphene by Photo-patterned Gold Nanoparticles. ACS Nano, 2011, 5, 3639-3644.	7.3	85
76	Protein Quality of Wheat Desirable for Making Fresh White Salted Noodles and Its Influences on Processing and Texture of Noodles. Cereal Chemistry, 2003, 80, 297-303.	1.1	83
77	Chemically fluorinated graphene oxide for room temperature ammonia detection at ppb levels. Journal of Materials Chemistry A, 2017, 5, 19116-19125.	5.2	83
78	In situ hybridization of carbon nanotubes with bacterial cellulose for three-dimensional hybrid bioscaffolds. Biomaterials, 2015, 58, 93-102.	5.7	82
79	Atomic layer etching of graphene for full graphene device fabrication. Carbon, 2012, 50, 429-435.	5.4	80
80	Wafer-scale graphene/ferroelectric hybrid devices for low-voltage electronics. Europhysics Letters, 2011, 93, 17002.	0.7	74
81	Laser-directed synthesis of strain-induced crumpled MoS2 structure for enhanced triboelectrification toward haptic sensors. Nano Energy, 2020, 78, 105266.	8.2	74
82	Number of graphene layers as a modulator of the open-circuit voltage of graphene-based solar cell. Applied Physics Letters, $2010,97,.$	1.5	70
83	Flexible, transparent single-walled carbon nanotube transistors with graphene electrodes. Nanotechnology, 2010, 21, 425201.	1.3	70
84	A transparent and stretchable graphene-based actuator for tactile display. Nanotechnology, 2013, 24, 145501.	1.3	70
85	Extracting subnanometer single shells from ultralong multiwalled carbon nanotubes. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 14155-14158.	3.3	64
86	High-performance ultraviolet photodetectors based on solution-grown ZnS nanobelts sandwiched between graphene layers. Scientific Reports, 2015, 5, 12345.	1.6	62
87	Mechanical and Environmental Stability of Polymer Thin-Film-Coated Graphene. ACS Nano, 2012, 6, 2096-2103.	7.3	61
88	Bacterial Cellulose Nanofibrillar Patch as a Wound Healing Platform of Tympanic Membrane Perforation. Advanced Healthcare Materials, 2013, 2, 1525-1531.	3.9	59
89	Strain Relaxation of Graphene Layers by Cu Surface Roughening. Nano Letters, 2016, 16, 5993-5998.	4.5	59
90	Far-infrared study of substrate-effect on large scale graphene. Applied Physics Letters, 2011, 98, .	1.5	58

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91	All-fiber dissipative soliton laser with 10.2 nJ pulse energy using an evanescent field interaction with graphene saturable absorber. Laser Physics Letters, 2014, 11, 015101.	0.6	58
92	An Electrochemically Controllable Nanomechanical Molecular System Utilizing Edge-to-Face and Face-to-Face Aromatic Interactions. Organic Letters, 2002, 4, 3971-3974.	2.4	56
93	Surface-Engineered Graphene Quantum Dots Incorporated into Polymer Layers for High Performance Organic Photovoltaics. Scientific Reports, 2015, 5, 14276.	1.6	56
94	Graphene quantum dots-decorated ZnS nanobelts with highly efficient photocatalytic performances. RSC Advances, 2016, 6, 24115-24120.	1.7	56
95	Sub-100-fs Cr:YAG laser mode-locked by monolayer graphene saturable absorber. Optics Letters, 2013, 38, 1745.	1.7	54
96	Origin of White Electroluminescence in Graphene Quantum Dots Embedded Host/Guest Polymer Light Emitting Diodes. Scientific Reports, 2015, 5, 11032.	1.6	54
97	Monolayer Graphene-Directed Growth and Neuronal Differentiation of Mesenchymal Stem Cells. Journal of Biomedical Nanotechnology, 2015, 11, 2024-2033.	0.5	54
98	Optical Probing of the Electronic Interaction between Graphene and Hexagonal Boron Nitride. ACS Nano, 2013, 7, 1533-1541.	7.3	53
99	Ultrastrong Graphene–Copper Core–Shell Wires for High-Performance Electrical Cables. ACS Nano, 2018, 12, 2803-2808.	7.3	52
100	Detection of Acetone Vapor Using Graphene on Polymer Optical Fiber. Journal of Nanoscience and Nanotechnology, 2011, 11, 5939-5943.	0.9	48
101	Laser-Induced Solid-Phase Doped Graphene. ACS Nano, 2014, 8, 7671-7677.	7.3	48
102	Graphene–nanowire hybrid structures for high-performance photoconductive devices. Journal of Materials Chemistry, 2012, 22, 8372.	6.7	47
103	Antimony Nanowires Self-Assembled from Sb Nanoparticles. Journal of Physical Chemistry B, 2004, 108, 16723-16726.	1.2	46
104	Fluorinated CYTOP passivation effects on the electrical reliability of multilayer MoS ₂ field-effect transistors. Nanotechnology, 2015, 26, 455201.	1.3	46
105	Engineering electrical properties of graphene: chemical approaches. 2D Materials, 2015, 2, 042001.	2.0	46
106	Au decoration of a graphene microchannel for self-activated chemoresistive flexible gas sensors with substantially enhanced response to hydrogen. Nanoscale, 2019, 11, 2966-2973.	2.8	46
107	Layer-Selective Synthesis of MoS ₂ and WS ₂ Structures under Ambient Conditions for Customized Electronics. ACS Nano, 2020, 14, 8485-8494.	7.3	41
108	Simultaneous Etching and Doping by Cu-Stabilizing Agent for High-Performance Graphene-Based Transparent Electrodes. Chemistry of Materials, 2014, 26, 2332-2336.	3.2	40

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109	Stable n-type doping of graphene via high-molecular-weight ethylene amines. Physical Chemistry Chemical Physics, 2015, 17, 29492-29495.	1.3	40
110	Tailored Graphene Micropatterns by Waferâ€Scale Direct Transfer for Flexible Chemical Sensor Platform. Advanced Materials, 2021, 33, e2004827.	11.1	40
111	Graphene mode-locked femtosecond Yb:KLuW laser. Applied Physics Letters, 2012, 101, .	1.5	39
112	High-performance near-field electromagnetic wave attenuation in ultra-thin and transparent graphene films. 2D Materials, 2017, 4, 025003.	2.0	36
113	Theoretical Study of the Conformations and Strain Energies of [n,n]Metaparacyclophanes:Â Indication of Stable Edge-to-Face and Displaced Face-to-Face Conformers forn= 4. Journal of Organic Chemistry, 1999, 64, 5661-5665.	1.7	35
114	Defect-engineered MoS ₂ with extended photoluminescence lifetime for high-performance hydrogen evolution. Journal of Materials Chemistry C, 2019, 7, 10173-10178.	2.7	34
115	Roll-to-roll continuous patterning and transfer of graphene via dispersive adhesion. Nanoscale, 2015, 7, 7138-7142.	2.8	33
116	Non-destructive electron microscopy imaging and analysis of biological samples with graphene coating. 2D Materials, 2016, 3, 045004.	2.0	32
117	Tension-controlled single-crystallization of copper foils for roll-to-roll synthesis of high-quality graphene films. 2D Materials, 2018, 5, 024002.	2.0	31
118	Thermal stability of metal Ohmic contacts in indium gallium zinc oxide transistors using a graphene barrier layer. Applied Physics Letters, 2013 , 102 , .	1.5	30
119	Efficient solution-processed small-molecule solar cells by insertion of graphene quantum dots. Nanoscale, 2014, 6, 15175-15180.	2.8	30
120	High-performance polymer light emitting diodes with interface-engineered graphene anodes. Organic Electronics, 2013, 14, 2324-2330.	1.4	29
121	Roll-to-Roll Laser-Printed Graphene–Graphitic Carbon Electrodes for High-Performance Supercapacitors. ACS Applied Materials & Interfaces, 2018, 10, 1033-1038.	4.0	29
122	Low-temperature growth and direct transfer of graphene–graphitic carbon films on flexible plastic substrates. Nanotechnology, 2012, 23, 344016.	1.3	28
123	Ultrafast modulation of optical transitions in monolayer and multilayer graphene. Carbon, 2011, 49, 4781-4785.	5.4	27
124	A highly conducting graphene film with dual-side molecular n-doping. Nanoscale, 2014, 6, 9545-9549.	2.8	27
125	Graphene Quantum Dots from Carbonized Coffee Bean Wastes for Biomedical Applications. Nanomaterials, 2021, 11, 1423.	1.9	27
126	A New Type of Helix Pattern in Polyalanine Peptide. Journal of the American Chemical Society, 2001, 123, 514-515.	6.6	26

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127	Interactions of Neutral and Cationic Transition Metals with the Redox System of Hydroquinone and Quinone: Theoretical Characterization of the Binding Topologies, and Implications for the Formation of Nanomaterials. Chemistry - A European Journal, 2006, 12, 4885-4892.	1.7	26
128	Large-area graphene synthesis and its application to interface-engineered field effect transistors. Solid State Communications, 2012, 152, 1350-1358.	0.9	26
129	How to optically count graphene layers. Optics Letters, 2012, 37, 3765.	1.7	25
130	Structure-controllable growth of nitrogenated graphene quantum dots via solvent catalysis for selective C-N bond activation. Nature Communications, 2021, 12, 5879.	5.8	25
131	Self-organizing properties of triethylsilylethynyl-anthradithiophene on monolayer graphene electrodes in solution-processed transistors. Nanoscale, 2013, 5, 11094.	2.8	24
132	Multiscale Modulation of Nanocrystalline Cellulose Hydrogel via Nanocarbon Hybridization for 3D Neuronal Bilayer Formation. Small, 2017, 13, 1700331.	5.2	24
133	Solution-Processed n-Type Graphene Doping for Cathode in Inverted Polymer Light-Emitting Diodes. ACS Applied Materials & Diodes, 2018, 10, 4874-4881.	4.0	24
134	Efficient heat generation in large-area graphene films by electromagnetic wave absorption. 2D Materials, 2017, 4, 025037.	2.0	23
135	Multifunctional reduced graphene oxide-CVD graphene core–shell fibers. Nanoscale, 2019, 11, 12637-12642.	2.8	22
136	Grapheneâ€Based Intrinsically Stretchable 2Dâ€Contact Electrodes for Highly Efficient Organic Lightâ€Emitting Diodes. Advanced Materials, 2022, 34, .	11.1	22
137	Highly uniform growth of monolayer graphene by chemical vapor deposition on Cu–Ag alloy catalysts. Physical Chemistry Chemical Physics, 2014, 16, 3087.	1.3	21
138	Thermoelectric Properties of Thermally Reduced Graphene Oxide Observed by Tuning the Energy States. ACS Sustainable Chemistry and Engineering, 2018, 6, 7468-7474.	3.2	21
139	An electrochemical approach to graphene oxide coated sulfur for long cycle life. Nanoscale, 2015, 7, 13249-13255.	2.8	20
140	Nanoscale Direct Mapping of Noise Source Activities on Graphene Domains. ACS Nano, 2016, 10, 10135-10142.	7.3	20
141	Double-Layer Graphene Outperforming Monolayer as Catalyst on Silicon Photocathode for Hydrogen Production. ACS Applied Materials & Samp; Interfaces, 2017, 9, 3570-3580.	4.0	20
142	Hierarchical carbon–silicon nanowire heterostructures for the hydrogen evolution reaction. Nanoscale, 2018, 10, 13936-13941.	2.8	20
143	Controlling the ripple density and heights: a new way to improve the electrical performance of CVD-grown graphene. Nanoscale, 2016, 8, 9822-9827.	2.8	19
144	Enhanced Chemical Reactivity of Graphene by Fermi Level Modulation. Chemistry of Materials, 2018, 30, 5602-5609.	3.2	18

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145	Ultrahigh-strength multi-layer graphene-coated Ni film with interface-induced hardening. Carbon, 2021, 178, 497-505.	5.4	18
146	Fast and complete recovery of TMDs-decorated rGO fiber gas sensors at room temperature. Applied Surface Science, 2022, 578, 151832.	3.1	18
147	Distortion in Two-Dimensional Shapes of Merging Nanobubbles: Evidence for Anisotropic Gas Flow Mechanism. Langmuir, 2016, 32, 11303-11308.	1.6	17
148	Graphene Quantum Dots Alleviate Impaired Functions in Niemann-Pick Disease Type C in Vivo. Nano Letters, 2021, 21, 2339-2346.	4.5	17
149	Threshold Voltage Control of Multilayered MoS ₂ Fieldâ€Effect Transistors via Octadecyltrichlorosilane and their Applications to Active Matrixed Quantum Dot Displays Driven by Enhancementâ€Mode Logic Gates. Small, 2019, 15, e1803852.	5.2	16
150	Engineering structures and functions of mesenchymal stem cells by suspended large-area graphene nanopatterns. 2D Materials, 2016, 3, 035013.	2.0	15
151	Enhancement of electrochemical properties by polysulfide trapping in a graphene-coated sulfur cathode on patterned current collector. Chemical Communications, 2016, 52, 3203-3206.	2.2	15
152	Mapping of Bernal and non-Bernal stacking domains in bilayer graphene using infrared nanoscopy. Nanoscale, 2017, 9, 4191-4195.	2.8	15
153	Catalytic degradation of phenols by recyclable CVD graphene films. Nanoscale, 2018, 10, 5840-5844.	2.8	15
154	Performance enhancement of graphene assisted CNT/Cu composites for lightweight electrical cables. Carbon, 2021, 179, 53-59.	5.4	15
155	Synthesis of Ultra-Long Super-Aligned Double-Walled Carbon Nanotube Forests. Journal of Nanoscience and Nanotechnology, 2011, 11, 470-473.	0.9	14
156	Carbon nanostructure-based saturable absorber mirror for a diode-pumped 500-MHz femtosecond Yb:KLu(WO_4)_2 laser. Optics Express, 2014, 22, 15626.	1.7	14
157	3D graphene-cellulose nanofiber hybrid scaffolds for cortical reconstruction in brain injuries. 2D Materials, 2019, 6, 045043.	2.0	14
158	Synergistic Molecular Engineering of Holeâ€Injecting Conducting Polymers Overcomes Luminescence Quenching in Perovskite Lightâ€Emitting Diodes. Advanced Optical Materials, 2021, 9, 2100646.	3.6	14
159	Strain-Assisted Wafer-Scale Nanoperforation of Single-Layer Graphene by Arrayed Pt Nanoparticles. Chemistry of Materials, 2015, 27, 7003-7010.	3.2	13
160	Highly stable Si MOSFET-type humidity sensor with ink-jet printed graphene quantum dots sensing layer. Sensors and Actuators B: Chemical, 2021, 343, 130134.	4.0	13
161	Mechanistic Study on Electrochemical Reduction of Calix[4]quinone in Acetonitrile Containing Water§. Journal of Physical Chemistry B, 2004, 108, 4927-4936.	1.2	12
162	Controlled growth of a graphene charge-floating gate for organic non-volatile memory transistors. Organic Electronics, 2015, 27, 227-231.	1.4	12

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163	Facile one-pot photosynthesis of stable Ag@graphene oxide nanocolloid core@shell nanoparticles with sustainable localized surface plasmon resonance properties. Journal of Materials Chemistry C, 2017, 5, 10016-10022.	2.7	12
164	<i>Inâ€situ</i> Raman spectroscopy of current arrying graphene microbridge. Journal of Raman Spectroscopy, 2014, 45, 168-172.	1.2	11
165	Structural evolution of graphene in air at the electrical breakdown limit. Carbon, 2016, 99, 466-471.	5.4	11
166	Facile Synthesis of N-Doped Graphene Quantum Dots as Novel Transfection Agents for mRNA and pDNA. Nanomaterials, 2021, 11, 2816.	1.9	11
167	Efficient n-doping of graphene films by APPE (aminophenyl propargyl ether): a substituent effect. Physical Chemistry Chemical Physics, 2013, 15, 18353.	1.3	10
168	Continuous Films of Selfâ€Assembled Graphene Quantum Dots for nâ€Type Doping of Graphene by UVâ€Triggered Charge Transfer. Small, 2017, 13, 1603142.	5.2	10
169	Degradation Protection of Color Dyes Encapsulated by Graphene Barrier Films. Chemistry of Materials, 2019, 31, 7173-7177.	3.2	10
170	Effect of uni-axial strain on THz/far-infrared response of graphene. Applied Physics Letters, 2012, 100, .	1.5	8
171	A Facile Route for Patterned Growth of Metal–Insulator Carbon Lateral Junction through One-Pot Synthesis. ACS Nano, 2015, 9, 8352-8360.	7. 3	8
172	High-Density Single-Layer Coating of Gold Nanoparticles onto Multiple Substrates by Using an Intrinsically Disordered Protein of α-Synuclein for Nanoapplications. ACS Applied Materials & Discrete Ramp; Interfaces, 2017, 9, 8519-8532.	4.0	8
173	Multifunctional graphene oxide for bioimaging: emphasis on biological research. European Journal of Nanomedicine, 2017, 9, .	0.6	8
174	Gold nanoparticle-mediated non-covalent functionalization of graphene for field-effect transistors. Nanoscale Advances, 2021, 3, 1404-1412.	2.2	8
175	Graphene nanonet for biological sensing applications. Nanotechnology, 2013, 24, 375302.	1.3	7
176	Graphene oxide catalyzed cis-trans isomerization of azobenzene. APL Materials, 2014, 2, .	2.2	7
177	Strong hole-doping and robust resistance-decrease in proton-irradiated graphene. Scientific Reports, 2016, 6, 21311.	1.6	7
178	Oral administration of microbiome-friendly graphene quantum dots as therapy for colitis. 2D Materials, 2021, 8, 025036.	2.0	7
179	Synthesis and applications of graphene for flexible electronics. , 2011, , .		6
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